



Total Maximum Daily Load Information Sheet

Kelley Branch

Waterbody Segment at a Glance:

County: Boone
Nearby Cities: Columbia
Length of impairment: 1 mile
Pollutant: Habitat Loss
Source: Off-Road Vehicles (ORV)
in Finger Lakes State Park



TMDL Priority Ranking: Medium

Description of the Problem

Beneficial uses of Kelley Branch:

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life and Human Health associated with Fish Consumption

Use that is impaired

- Protection of Warm Water Aquatic Life

Standards that apply

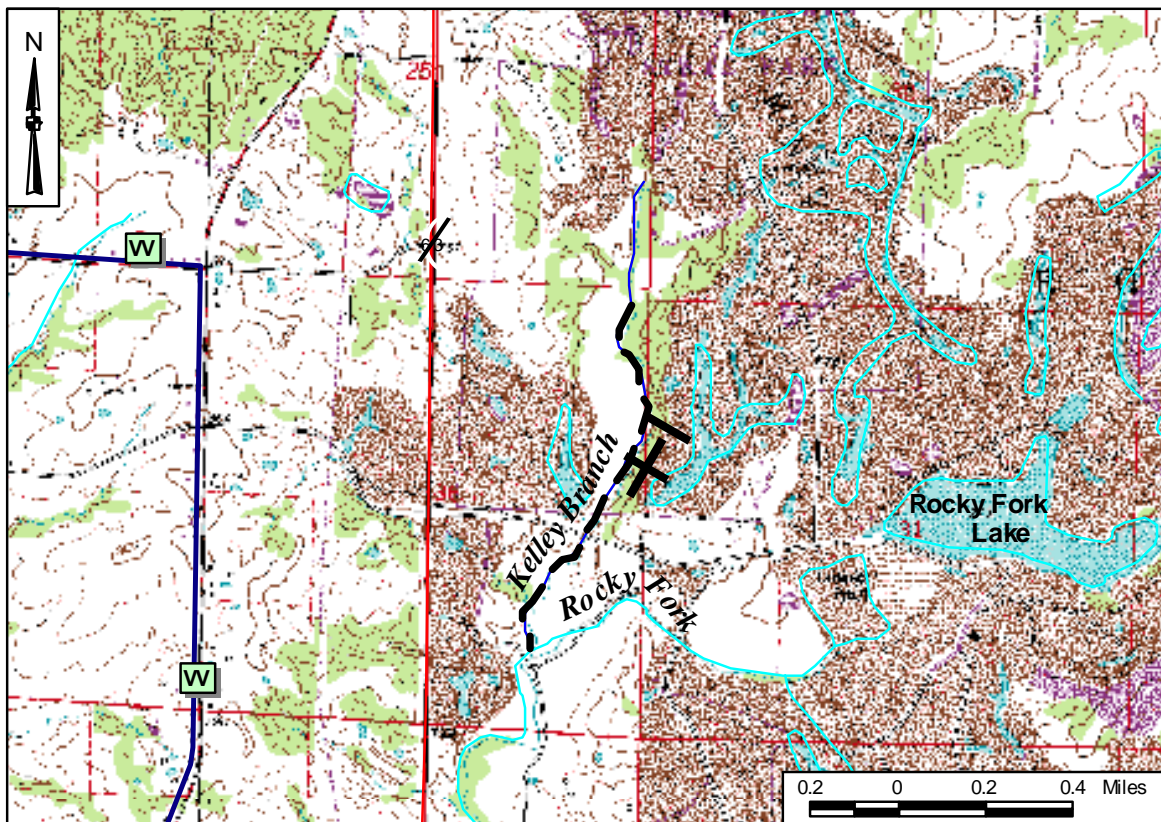
General criteria are contained in Missouri's Water Quality Standards 10 CSR 20-7.030 (3). The criteria that apply to Kelley Branch are (A), (C) and (G), and they state:

- (A) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
- (C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
- (G) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;

Several hundred acres of strip mined land about six miles north of Columbia were purchased by the Department of Natural Resources and named Finger Lakes State Park. The park topography consists of small, steep-sided hills with many small ponds in between. This has made the area a favorite spot for recreational off-road vehicle (ORV) use. Many ORV trails frequently cross or travel the stream channel of Kelley Branch itself. Aquatic habitat has been degraded and in some areas completely eliminated, leaving the channel resembling a well traveled gravel road. Immediately south of the State Park, Kelley Branch joins Rocky Fork, and while this portion of the

stream is not directly impaired by ORV traffic, it shows evidence of heavy sedimentation, much of which may have occurred before the mined areas became well vegetated. Approximately one-half mile of Kelley Branch has impaired aquatic habitat, and another half-mile has lost aquatic habitat due to ORV traffic in the stream. About one-half mile of Rocky Fork has impaired aquatic habitat due to excessive sedimentation, which appears to be eroding from the stream or riparian areas of Kelley Branch within the state park. The park management plan establishes designated trails along and across Kelley Branch using “hardened” stream crossings, and restores and protects the riparian border along the stream. An educational component will be included to gain park users’ support and cooperation. The work is ongoing and completion is expected by December 2004. A Total Maximum Daily Load document was written for Kelley Branch in 2003.

Map of Impaired Portion of Kelley Branch in Boone County, Missouri



--- Impaired Segment → Direction of Flow

For more information call or write:

Missouri Department of Natural Resources

Water Pollution Control Program

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Program Home Page: www.dnr.state.mo.us/wpscd/wpcp/index.html